

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Original) A dopaminergic neuron proliferative progenitor cell marker polynucleotide probe comprising a sequence selected from the following nucleotide sequences (1) to (5):

- (1) a nucleotide sequence complementary to a nucleotide sequence of SEQ ID NO: 1 or 2;
- (2) a nucleotide sequence complementary to a nucleotide sequence encoding an amino acid sequence of SEQ ID NO: 3 or 4;
- (3) a nucleotide sequence complementary to a nucleotide sequence encoding a sequence lacking a transmembrane domain in an amino acid sequence of SEQ ID NO: 3 or 4;
- (4) a nucleotide sequence that hybridizes under stringent conditions with a polynucleotide consisting of a nucleotide sequence of SEQ ID NO: 1 or 2; and,
- (5) a nucleotide sequence comprising at least 15 contiguous nucleotides selected from sequences of (1) to (4).

2. (Original) An antibody against a polypeptide selected from the following (1) to (6):

- (1) a polypeptide encoded by a nucleotide sequence of SEQ ID NO: 1 or 2;
- (2) a polypeptide comprising an amino acid sequence of SEQ ID NO: 3 or 4;
- (3) a polypeptide comprising an amino acid sequence lacking a transmembrane domain in an amino acid sequence of SEQ ID NO: 3 or 4;
- (4) a polypeptide comprising an amino acid sequence with a deletion, insertion, substitution, or addition of one or more amino acids in an amino acid sequence of SEQ ID NO: 3 or 4;

- (5) a polypeptide encoded by a nucleotide sequence that hybridizes under stringent conditions with a sequence complementary to a nucleotide sequence of SEQ ID NO: 1 or 2; and,
- (6) a polypeptide that is a fragment of a polypeptide of (1) to (5) comprising at least 8 amino acid residues.

3. (Currently Amended) A method of selecting a dopaminergic neuron proliferative progenitor cell, wherein the method comprises the step of contacting the polynucleotide of claim 1 with a cell sample thought to comprise a dopaminergic neuron proliferative progenitor cell.

4. (Currently Amended) A method of selecting a dopaminergic neuron proliferative progenitor cell, wherein the method comprises the step of contacting the antibody of claim 2 with a cell sample thought to comprise a dopaminergic neuron proliferative progenitor cell.

5. (Currently Amended) A method of postmitotic selecting a dopaminergic neuron ~~proliferative~~ progenitor cell comprising the steps of:

- (1) selecting a dopaminergic neuron proliferative progenitor cell using the method of ~~selecting a dopamine producing neuron progenitor cell~~ of claim 3 or 4;
- (2) culturing the proliferative progenitor cell selected in (1); and,
- (3) screening the progenitor cell cultured in (2) using a postmitotic dopaminergic neuron marker.

6. (Currently Amended) A dopaminergic neuron proliferative progenitor cell ~~prior to cell cycle exit~~ selected using the method of claims 3 or 4 ~~any one of claims 3 to 5~~.

7. (Currently Amended) A method of isolating a gene specific to a dopaminergic neuron proliferative progenitor cell and a gene specific to each maturation stage of the progenitor cell differentiating into a dopaminergic neuron, wherein the method comprises the

step of detecting and isolating a gene specifically expressed in the proliferative progenitor cell of claim 6, or a cell differentiated, induced, or proliferated from the progenitor cell.

8. (Currently Amended) A method of screening using maturation as an index, wherein the method comprises the steps of contacting a test substance with the proliferative progenitor cell of claim 6, and detecting the differentiation or proliferation of the progenitor cell induced by the contact.

9. (New) A postmitotic dopaminergic neuron progenitor cell selected using the method of claim 5.